REMARKS

By the foregoing amendment, Claims 1-24 and 26-63, being all claims currently pending in the application, have been cancelled. (Claims 25 and 64 having been cancelled previously.) In their place, new Claims 65-96 have been entered. In order to assist in the examination of the application, Applicants note that new independent Claim 65 is based on former independent Claim 26, while new independent Claim 83 is based on former independent Claim 47. In both instances, these claims incorporate the limitations previously recited in Claims 11, 27 and 48. In particular, these claims require that the transducer transmits the signal representing the sound wirelessly to the measuring device, and that the wireless transmission of the signal takes the form of light reflected from the transducer. In addition, they also recite that the measurement device is an optical device.

Claims 16-18, 42-44, 61 and 62 have been rejected under 35 U.S.C. §112, first paragraph for failing to comply with the enablement requirement based on the observation that the application fails to disclose how the tracking device would communicate with the measuring device. In regard to this ground of rejection, Applicants note that Claim 16 corresponds to new Claim 78, while Claim 61 corresponds to new Claim 94.

In response to the latter ground of rejection, Applicants note that tracking devices, and particularly video tracking devices such as recited in Claims 78 and 94 are extremely well known. Accordingly, Applicants further submit that a person skilled in the art would have no difficulty in making and using the invention based on the disclosure. In particular, a skilled person would be able to select and utilize a suitable tracking device in a routine manner. Accordingly, Applicants respectfully submit that Claims 78 and 94 satisfy the disclosure requirement of 35 U.S.C. §112, first paragraph.

With regard to the prior art rejections set forth in paragraphs 6 through 59 of the Office Action, Applicants note that independent Claims 65 and 83 each provide, in varying language, that the wireless transmission of the signal from the transducer to the measuring device is performed by way of light reflected from the transducer, and furthermore that the measurement device itself is an optical device. With this feature in mind, Applicants note the following with regard to the cited prior art.

The Cain et al reference discloses a noise cancellation system which corresponds to the state of the art upon which the present invention is based. That is, it incorporates structure corresponding to the limitations of Claim 65 prior to the characterizing features recited after the word "wherein". (See Abstract.) The Fürstenau et al reference, on the other hand, discloses a self-contained optical microphone (transducer) which acts on, and produces, optical

signals carried by an optic fiber. A transducer 10 receives vibrations corresponding to a sound incident on the transducer surface 11, and produces mechanical vibrations of a reflective surface 6. The latter in turn modulates the reflection of light provided by an optic fiber, back through the optic fiber itself. The reflecting surfaces are located very close together, and preferably touching, as noted, for example, at Column 3, lines 50-60. With regard to Claim 11 (the limitations of which, as noted previously, have been incorporated in the independent claims of the present application), the Office Action states that the system of Cain et al may employ any known microphone, and that if the microphone of Fürstenau et al were employed, the subject matter of Claim 11 would result.

Applicants respectfully submit, however, that the conclusion drawn in this regard is inappropriate. That is, if the microphone of Fürstenau et al were incorporated into the system of Cain et al, it would still be necessary to utilize the latter system. The microphone would therefore have to be connected to the dynamic noise controller over an optic fiber, in the manner shown in Figure 6 of Cain et al. There is no suggestion, however, in either Fürstenau et al or Cain et al (or any combination thereof) that the transducer of Fürstenau et al may be arranged to transmit signals wirelessly to the measuring device of Cain et al.

Independent Claim 65 of the present application requires, among other things, that:

1. The transducer be mounted on the body of the observer;

2. The measuring device be remote from the transducer;

3. The transducer wirelessly transmits the signal representing sound in the vicinity of the ear canal to the measuring device;

4. The wireless transmission of the signal takes the form of light reflected from the transducer; and

5. The measurement device is an optical device.

Combining the teachings of Fürstenau et al and Cain et al, one would arrive at a system in which the microphone of Fürstenau et al is placed on or in the ear of the observer, and is connected to the dynamic noise controller via an optic fiber. Such an arrangement does not provide at least features 3-4 listed above, since the communication between the transducer (the microphone of Fürstenau et al) and the measuring device (the dynamic noise controller 46 of Cain et al) would take place over an optic fiber, not wirelessly. Wireless transmission is defined at the end of the description to refer to transmission in which no physical connection is required. Light is not reflected from the transducer (the microphone of Fürstenau et al). Communication of the signal over an optic fiber would not resolve the problems discussed at page 3, second full paragraph and page 4, first and second paragraphs. Such a system would be

unable to measure remotely the sound levels proximate a person's ear, as required by the present invention. (See specification at page 6, final paragraph.)

The present invention provides a system which can measure noise level in the immediate vicinity of an observer's ear, without intrusive placement of sensors, cables and the like, as indicated at page 8, second full paragraph of the specification. Thus, the invention provides effective cancellation of noise in the region of interest – near the observer's ear – without the inconvenience of physically connecting the observer to the vehicle, by wire or by an optic cable. These advantages could not be achieved, however, with the cited combination of Fürstenau et al and Cain et al.

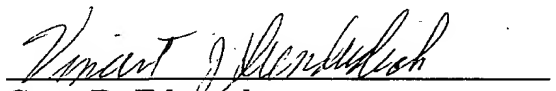
Accordingly, Applicants respectfully submit that the subject matter defined by the enclosed claims distinguishes over the cited prior art, and provides significant advantages over the prior art arrangements.

In light of the foregoing remarks, this application should be in condition for allowance, and early passage of this case to issue is respectfully requested. If there are any questions regarding this amendment or the application in general, a telephone call to the undersigned would be appreciated since this should expedite the prosecution of the application for all concerned.

If necessary to effect a timely response, this paper should be considered as a petition for an Extension of Time sufficient to effect a timely response, and

please charge any deficiency in fees or credit any overpayments to Deposit Account No. 05-1323 (Docket #3036/49818).

Respectfully submitted,



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